# 2011 VALLEY COUNTY WATER DISTRICT DRINKING WATER QUALITY

Chemical	MCL	PHG	Average	Range of	MCL	Most Recent	Typical Source of Contaminant				
		(MCLG)	Amount	Detections	Violation?	Test Year					
PRIMARY DRINKING WATER STANDARDSHealth-Related Standards											
RADIOLOGICALS											
Uranium (pCi/L)	20	0.43	0.6	ND - 1.2	No	2011	Erosion of natural deposits				
INORGANIC CHEMICALS											
Arsenic (ppb)	10	0.004	<2	ND - 2.1	No	2011	Erosion of natural deposits				
Barium (ppm)	1	2	0.12	0.11 - 0.12	No	2011	Erosion of natural deposits				
Fluoride (ppm) - naturally occurring	2	1	0.29	0.20 - 0.33	No	2011	Erosion of natural deposits				
Nitrate as NO3 (ppm)	45	45	8	3.2 - 27	No	2011	Leaching from fertilizer use				
SECONDARY DRINKING WATER STANDARDSAesthetic Standards, Not Health-Related											
Chloride (ppm)	500	NA	18	12 - 22	No	2009	Runoff/leaching from natural deposits				
Odor (threshold odor number)	3	NA	1	1	No	2009	Naturally-occuring organic materials				
Specific Conductance ( mho/cm)	1,600	NA	405	370 - 460	No	2009	Substances that form ions in water				
Sulfate (ppm)	500	NA	23	19 - 27	No	2009	Runoff/leaching from natural deposits				
Total Dissolved Solids (ppm)	1,000	NA	255	230 - 290	No	2011	Runoff/leaching from natural deposits				
Turbidity (NTU)	5	NA	0.09	ND - 0.23	No	2009	Soil runoff				
UNREGULATED CHEMICALS OF INTEREST											
Alkalinity as CaCO3 (ppm)	Not Regulated	NA	163	160 - 170	No	2009	Runoff/leaching from natural deposits				
Bicarbonate as HCO3 (ppm)	Not Regulated	NA	198	190 - 210	No	2009	Runoff/leaching from natural deposits				
Calcium (ppm)	Not Regulated	NA	51	44 - 59	No	2009	Runoff/leaching from natural deposits				
Hardness as CaCO3 (ppm)	Not Regulated	NA	173	150 - 200	No	2009	Runoff/leaching from natural deposits				
Grains of Hardness (gpg)	Not Regulated	NA	10	9 - 12	No	2009	Runoff/leaching from natural deposits				
Magnesium (ppm)	Not Regulated	NA	10	9.0 - 12	No	2009	Runoff/leaching from natural deposits				
pH (pH Units)	Not Regulated	NA	7.9	7.8 - 7.9	No	2009	Hydrogen ion concentration				
Potassium (ppm)	Not Regulated	NA	3.9	3.4 - 4.5	No	2009	Runoff/leaching from natural deposits				
Sodium (ppm)	Not Regulated	NA	12	12 - 13	No	2009	Runoff/leaching from natural deposits				
MCI = maximum contaminant level: MCI G = maximum contaminant level goal: NA = not applicable: ND = not detected: PHG = public health goal:											

MCL = maximum contaminant level; MCLG = maximum contaminant level goal; NA = not applicable; ND = not detected; PHG = public health goal;

gpg = grains per gallon; ppb = parts per billion or micrograms per liter; ppm = parts per million or milligrams per liter; ppt = parts per trillion or nonograms per liter;

NTU = Nephelometric Turbidity Units; mho/cm = micromhos per centimeter; < = average is less than the reporting limit; pCi/l = picoCuries per liter;

### LEAD AND COPPER CONCENTRATIONS AT RESIDENTIAL TAPS PHG 90th Percentile **Action Level** Site Exceeding AL/ AL Chemical **Typical Source of Contaminant** (AL) Number of Sites Violation? Value 1.3 0.3 0.18 0/30 No Copper (ppm) Corrosion of household plumbing 15 0.2 3.4 1/30 Lead (ppb) No Corrosion of household plumbing

Thirty residences are tested every three years for lead and copper at-the-tap. The most recent set of samples was collected in 2011. Copper was detected in 27 samples; none exceeded the regulatory action level (AL). Lead was detected in 1 sample; 1 sample exceeded the regulatory AL. The AL is the concentration of lead or copper which if exceeded in more than ten percent of the samples tested, triggers treatment or other requirements that a water system must follow.

DISTRIBUTION SYSTEM WATER QUALITY									
Chemical/Bacteria	MCL (MRDL/MRDLG)	Results	Range of Detections	MCL Violation?	Typical Source of Contaminant				
Total Trihalomethanes (ppb)*	80	1.6	ND - 3.4	No	Byproduct of chlorine disinfection				
Haloacetic Acids (ppb)*	60	0.5	ND - 11	No	Byproduct of chlorine disinfection				
Coliform Bacteria** (% Positive)	5 (MCLG = 0)	2		No	Naturally present in the environment				
Chlorine Residual (ppm)*	(4 / 4)	0.79	0.29 - 0.87	No	Drinking water disinfectant				

MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; MCLG = maximum contaminant level goal

# **DEFINITIONS**

## Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.

## Maximum Contaminant Level Goal (MCLG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by EPA.

## Maximum Residual Disinfectant Level (MRDL)

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

## Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

## **Primary Drinking Water Standard**

MCLs and MRDLs for contaminants that affect heath along with their monitoring and reporting requirements and water treatment requirements.

## Public Health Goal (PHG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

## Regulatory Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

## Secondary MCLs

Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

## Measurements

Water is sampled and tested throughout the year. Contaminants are measured in parts per million (ppm) and parts per billion (PPB). If this is difficult to imagine, think about these comparisons:

## Parts per million:

- 1 drop in 14 gallons; 1 second in 12 days 1 penny in \$10,000; 1 inch in 16 miles
- Parts per billion:
- 1 drop in 14,000 gallons, 1 second in 32 years 1 penny in \$10 million; 1 inch in 16,000 miles
- \* It is important to note, however, that even a small concentration of certain contaminants can adversely affect a water supply.
- \*\* The Sate allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

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# 2011 Water Quality/ Consumer Confidence Report



14521 Ramona Boulevard Baldwin Park, CA 91706 626 - 338 - 7301 Fax 626 - 814 - 2973 website: www.vcwd.org Margarita Vargas, President Lenet Pacheco, Vice Preside Jonathan Contreras, Director

County

Valley

Valley
County
Water
District



<sup>\*</sup> The table shows the highest running annual average for 2011, and the range of the individual results for samples collected in 2011.

<sup>\* \*</sup> The result is the higest percentage of positive samples collected in a month during 2011. Coliforms are bacteria used as an indicator that if present, indicates other potentially harmful microorganisms may be present. No more that 5.0% of the monthly samples may be Coliform - positive; therefore, the MCL was not violated in 2011.

# The 2011 Water Quality / Consumer Confidence Report

# **Regulating Drinking Water Quality**

Water utilities in California have provided an annual report to their customers since 1991, which summarizes the prior year's water quality and explains important issues regarding their drinking water. In 1996, the United States Congress reauthorized the Safe Drinking Water Act (SDWA), which was originally passed in 1974 and later amended in 1986. The 1996 reauthorization called for the enhancement of nation-wide drinking water regulations to include important components such as source water protection and public information. This year's water quality report covers water quality testing from calendar year 2011 and has been prepared in compliance with the consumer right-to-know regulations required by the SDWA 1996

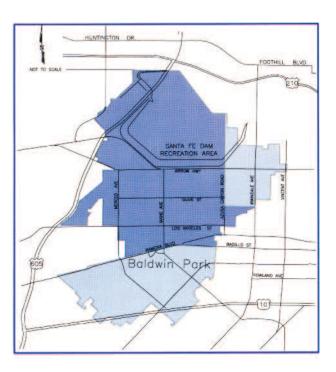
The United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) are the public agencies responsible for drafting and implementing regulations that ensure your tap water is safe to drink. USEPA and CDPH establish drinking water standards that limit the amount of contaminants in water provided to the public. CDPH also establishes water quality standards for bottled water that provide for the same protection of public health.

Valley County Water District regularly tests your drinking water using CDPH-approved methods to ensure its safety. Over 100 compounds have been monitored in Valley County Water District's water supply. Only the detected constituents are reported in the accompanying table. Again, in 2011, the water delivered to you by Valley County Water District met or surpassed all the State and Federal drinking water standards.

In addition, the Main San Gabriel Basin Watermaster (Watermaster), who manages our groundwater basin, continuously and vigilantly reviews upcoming State and Federal drinking water regulations. Watermaster has been proactive when monitoring unregulated contaminants in the Main San Gabriel Basin to ensure the water supply meets water quality standards.

# Source of Supply

Valley County Water District's water supply comes from groundwater wells located in the Main San Gabriel Groundwater Basin. However, as a result of historic industrial discharges, several of Valley County Water District's groundwater wells are contaminated and have been taken out of service. Water treatment facilities have been constructed at Valley County Water District to clean up groundwater contamination.



Valley County Water District Service Area

If you have questions about your water or the District, please contact us for answers...

For information about this report, or your water quality in general, please contact Mr. Tom Mortenson at (626) 856-5990. The Board of Directors meet on the second and fourth Mondays of each month at 5:30 PM at 14521 East Ramona Blvd. in the city of Baldwin Park. These meetings are open to the public.

Si usted tiene preguntas acerca de su agua potable o el Districto, por favor ponte en contacto con nosotros para obtener este formulario en espanol.

# **Drinking Water Source Assessment**

In accordance with the federal Safe Drinking Water Act, an assessment of the drinking water sources for Valley County Water District was completed in December 2002. The purpose of the drinking water source assessment to promote source water protection by identifying types of activities in the proximity of the drinking water sources which could pose a threat to the water quality. The assessment concluded that Valley County Water District's sources are considered most vulnerable to the following activities or facilities associated with contaminants detected in the water supply: gas stations, chemical/petroleum processing and storage, automobile repair shops, fleet/ truck/bus terminals, food processing, landfills/dumps. leaking underground storage tanks, dry cleaners and metal plating/ finishing/ fabricating. In addition, the sources are considered most vulnerable to the following activities or facilities not associated with contaminants detected in the water supply: pesticide/ fertilizer/ petroleum storage and transfer areas, railroad yards/ maintenance/ fueling area. A copy of the complete assessment is available at Valley County Water District at 14521 Ramona Boulevard, Baldwin Park, CA 91706. You may request a summary of the assessment to be sent to you by contacting Mr. Tom Mortenson at 626-856-5990.

# **Potential Contaminants in Drinking Water**

Sources of drinking water generally include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

# Contaminants that may be present in source water include:

**Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Pesticides and herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Radioactive contaminants**, that can be naturallyoccurring or can be the result of oil and gas production and mining activities. Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791), visit USEPA's Office of Ground Water and Drinking Water website at www.epa.gov/safewater/ or visit the CDPH website at www.cdph.ca.gov/certlic/drinkingwater.

# Immuno-compromised people

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

# **About Lead in Tap Water**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Valley County Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at: www.epa.gov/safewater/lead



## Nitrate

Nitrate in your tap water may have exceeded one-half the MCL in 2011, but it was never greater than the MCL. Nitrate in drinking water at levels above the MCL of 45 parts-permillion (ppm) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

# **Water Quality Standards**

In order to ensure that tap water is safe to drink, USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water standards established by USEPA and CDPH set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial pathogens.

Primary Drinking Water Standard: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Notification Level (NL): An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. city council, board of directors, and county board of supervisors).

# **Water Quality Goals**

In addition to mandatory water quality standards, USEPA and CDPH have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.

Maximum Residual Disinfectant Level Goal (MRDLG):
The level of a drinking water disinfectant below which there
is no known or expected risk to health. MRDLGs do not
reflect the benefits of the use of disinfectants to control
microbial contaminants.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

